CAMERON-COLE

January 21, 2005

Ms. Lisa A. Gotto
U.S. Environmental Protection Agency
Region VII
901 North 5th Street
Kansas City, Kansas 66101

RE: Response to EPA Comments on the Scope of Work for Limited Delineation and Verification Soil Sampling and Monitoring Well Installation
Clean Harbors Kansas, LLC
2549 New York Street, Wichita, Kansas
EPA Identification No: KSD007246846

Dear Ms. Gotto:

This letter provides responses to your December 28, 2004 comments on the document referenced above. U.S. Environmental Protection Agency (USEPA) comments are reproduced below in normal text, followed by the response in italicized text. The revised scope of work is provided as Attachment A.

1. The scope of work must include a statement specifying that the additional field activities will be performed in accordance with procedures in the approved Quality Assurance Project Plan and RFI Work Plan.

   Response: *The referenced scope of work has been revised to indicate all work will be conducted in accordance with the procedures outlined in the USEPA-approved Phase I RCRA Faciltiy Investigation (RFI) Work Plan dated October 1999.*

2. Encore is an acceptable sampling option according to EPA Method 5035; however, this is not the only or most cost-effective means to satisfy the method requirements. Some comparative studies suggest using a cut-off syringe to collect a subsample "plug" yields slightly higher concentrations of VOCs in soils than Encore. Collection of the "plug" is followed by sample preservation with either methanol or HCL-preserved de-ionized distilled water and laboratory extraction through the septa of the 40-ml VOA vial. The cut-off syringe method is also cheaper than Encore. CHK may choose to utilize whichever method it is most comfortable with implementing in the field.

   Response: *During the upcoming delineation and verification soil sampling, soil samples for analysis of volatile organic compounds will be collected using Encore samplers.*

3. EPA requests the following additional soil samples be obtained during this soil sampling event:

   A. Additional VOC verification samples from the Solids Gondola area to demonstrate correlation with some of the higher VOC results obtained on-site.

   Response: *Clean Harbors has revised the referenced scope of work to include the collection of two verification soil samples from previous boring locations B-86 and B-106.*

   B. One sample to verify results of the data from B-70 or B-99. These samples were collected outside the fenceline; additional samples should be completed for the purpose of ensuring that there are no uncontrolled exposures.

   Response: *Clean Harbors has revised the referenced scope of work to include the collection of two verification soil samples from previous boring location B-70.*

   The soil sampling locations identified in the above responses were agreed on in a telephone conversation with USEPA on January 5.

4. Please include a specification of the screen length projected for the three proposed monitoring wells along with a statement indicating screen intervals will be based on the observed VOC stratification. In addition, please ensure the screen intervals are reported as elevations.

   Response: *The original scope of work dated November 23, 2004 included the screen length for the three proposed monitoring wells. The shallow wells will be installed using 10-feet of screen and the deep well will be installed using five feet of screen. When the results of the additional well installation are reported, elevations of the screen intervals will be provided.*

The delineation and verification soil sampling, monitoring well installation is scheduled for the week of January 31, 2005. Quarterly groundwater and surface water monitoring will also be conducted during this week as described in the scope of work. Please call John Arbuthnot at 225-778-3596 if you have questions regarding these responses or the revised scope of work.

Sincerely,
Cameron-Cole, LLC

Janette D. Wilson
Project Manager

Brian Martinek
Senior Project Manager

cc: John Arbuthnot – Clean Harbors
John Cook – KDHE
Jeff McDermott - UPRR

Attachment

will be drummed and transported to the Clean Harbors site for proper handling by the facility personnel. The wells will be installed, developed, purged and sampled in accordance with the USEPA-approved Phase I RCRA Faciltiy Investigation (RFI) Work Plan dated October 1999.

Schedule

Upon receipt of KDHE and USEPA final approval of this proposed work, Cameron-Cole will schedule the field program. Currently, it is Cameron-Cole's intention to conduct this work in conjunction with the second quarter of groundwater and surface water sampling during the week of January 31, 2005. The results of this additional investigation will be submitted to USEPA and KDHE in the form of an RFI Report Addendum by August 20, 2005.

We look forward to working with you on this project. Please call John Arbuthnot at 225-778-3596 if you have questions regarding this scope of work.

Sincerely,

Cameron-Cole, L.L.C.

Janette D. Wilson
Project Manager

Brian C. Martinek
Senior Manager

Enclosures
Figure 1
Table 1

cc: John Cook – KDHE
John Arbuthnot – Clean Harbors
Jeff McDermott - UPRR

ATTACHMENT A

Revised Scope of Work for Limited Delineation and Verification Soil Sampling and Monitoring Well Installation

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Ms. Lisa A. Gotto
U.S. Environmental Protection Agency
Region VII
901 North 5th Street
Kansas City, Kansas 66101

RE: Revised Scope of Work for Limited Delineation and Verification Soil Sampling and Monitoring Well Installation
Clean Harbors Kansas, LLC
2549 New York Street, Wichita, Kansas
EPA Identification No: KSD007246846

Dear Ms. Gotto:

Cameron-Cole, LLC (Cameron-Cole), on behalf of Clean Harbors Kansas (Clean Harbors), is presenting this revised scope of work to address Kansas Department of Health and Environment's (KDHE) and U.S. Environmental Protection Agency (USEPA) comments on the *RCRA Facility Investigation Report* (January 2003) and USEPA's December 28, 2004 comments on the original (November 23, 2004) scope of work. The proposed scope of work includes limited delineation and verification soil sampling and the installation of three additional monitoring wells at the Clean Harbors Kansas facility (the facility) in Wichita, Kansas.

This scope of work was discussed during the October 18, 2004 site meeting, and the November 3, 2004 conference call between KDHE, USEPA, Clean Harbors, and Cameron-Cole representatives. Following is a description of the work to be completed:

Delineation and Verification Soil Sampling

The primary objective of the limited soil sampling is to further delineate shallow soil impacts west of Soil Boring B-86, located in the western portion of the site, and to verify volatile organic compound (VOC) soil analytical results in the vicinity of Building J, northeast of Building K outside the fenceline, and just west of the Solids Gondola Area using USEPA Method 5035/8260B.

The proposed soil boring locations are shown on Figure 1 and the detailed scope of work is described below:

- Based on the findings of previous site work, Cameron-Cole proposes to install two soil borings (B-110 and B-111) west of the vicinity of Soil Boring B-86 using a Geoprobe®. Three soil samples will be collected from the vadose zone of each boring at approximately 0 to 6-inches below ground surface, three feet below ground surface, and within three feet of saturated conditions. The samples will be submitted to Severn Trent Laboratory (STL) in Denver, Colorado for analysis of VOCs using USEPA Method 5035/8260B.

- To address KDHE's comments regarding previous soil sample collection methodology, Cameron-Cole proposes to collect two verification soil samples from previous boring locations B-31, B-96, B-100, and B-103 located in the vicinity of Building J; B-70 located outside the fenceline approximately 90 feet northeast of Building K; and B-86 and B-106 located south of Building C and west of the former Dry Solids Gondola Area. Proposed soil boring locations are shown on Figure 1. The proposed borings will be designated with a "V" to indicate verification samples location.

  These soil sample locations were selected to assess whether the detected concentrations of VOCs are biased low due to re-packing of soil samples into jars for off-site analysis. Two soil samples will be collected from the vadose zone of each boring at depths equivalent to the original sample depths. The samples will be submitted to STL in Denver, Colorado for analysis of VOCs using USEPA Method 5035/8260B.

Each soil boring will be advanced using a Geoprobe® and logged in the field by a Cameron-Cole geologist using the Unified Soil Classification Code (USCS). All soil borings will be installed in accordance with the procedures outlined in the USEPA-approved Phase I RCRA Faciltiy Investigation (RFI) Work Plan dated October 1999. Table 1 lists each of the proposed boring locations, sampling depth, and analytical parameters.

Soil samples collected for analysis of VOCs will be handled in a manner which will minimize the loss of potential contaminants due to volatilization and biodegradation. Samples to be analyzed by USEPA Method 8260B will be prepared in the field and laboratory by USEPA Method 5035, referred to as the *Closed-System Purge and Trap and Extraction for VOCs,*

A coring device and sample storage device (Encore® sampler or equivalent) will be used to collect soil samples for VOC analysis. The Encore® sampler is used to collect a sub-sample, in he field, directly from the soil material obtained by the shallow soil sampling or drilling procedures. The plastic Encore® sampling device is pushed into the desired sample core interval using a T-handle, and a sub-sample is removed. Since the entire sub-sample is used for analysis, three Encore sub-samples (one high level – greater than 200 ppb and two for low level - less than 200 ppb) will be collected from each soil boring interval to be tested. Encore® samples will be packed in dry ice and shipped to the laboratory for overnight deliver.

Once in the laboratory each sample will be frozen in lieu of preservation with sodium bisulfate and/or methanol. Preserving the sample in the laboratory extends the holding time to 14 days from the time of sample collection.

Monitoring Well Installation

To further assess downgradient impacts associated with the facility, three additional monitoring wells are proposed at the facility. One shallow and one deep well (SK-12S/12D) will be installed along the southern property boundary to address the area downgradient of SWMU #7 and SWMU #24, and one shallow well (SK-13S) will be installed approximately 180 feet downgradient of the facility, between the East Fork of Chisholm Creek and Interstate I-135, to assess the hydraulic effects that the East Fork of Chisholm Creek may have on contaminant migration. The proposed well locations are shown on Figure 1.

The proposed monitoring wells will be installed using the hollow-stem auger drilling method. The shallow wells will be installed to a depth of approximately 23 to 25 feet below land surface with 10 feet of 2-inch diameter, Schedule 40 polyvinyl chloride (PVC), 0.010-inch slot well screen attached to an appropriate amount of PVC riser. The deep well will be installed to approximately 40 feet below land surface with 5-feet of 2-inch diameter, Schedule 40 PVC, 0.010-inch slot well screen attached to an appropriate amount of PVC riser.

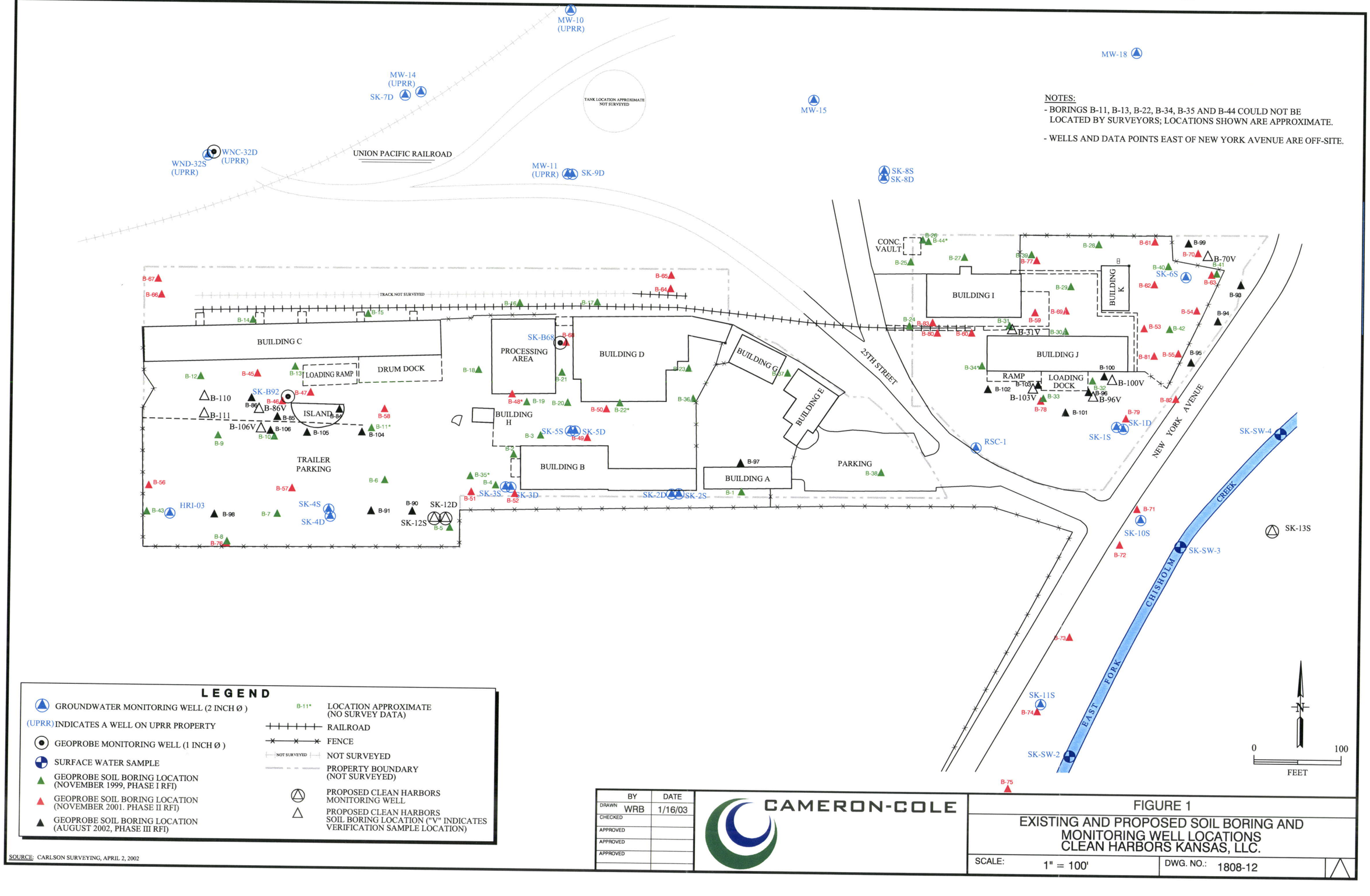
At each well, a filter pack of silica sand will be placed in the annular space from the bottom of the borehole to approximately two feet above the well screen. A cap of bentonite pellets, approximately three feet thick will be placed on top of the sand pack and the remaining annular space will be filled to near land surface with neat cement grout.

The wells will be competed with locking water-tight caps and flush-mount covers. Wells will be developed shortly after completion. Each well will be developed by using swabs and submersible pumps until a relatively clear, sediment-free discharge is obtained. Development water will be containerized for appropriate disposal. Any soil or groundwater generated during the drilling

Table 1
Sampling Details
Delineation and Verification Soil Sampling
Clean Harbors Kansas Facility
Wichita, Kansas

Boring Identification	Location Description	Soil Sample Depth				Soil Sample Analysis
		Ground Surface (0-6 inches)	Equivalent to the Original Shallow Sample Depth	Three Feet Below Ground Surface	Within Three Feet of Saturated Conditions	Volatile Organic Compounds
B-31V	Area Southeast Bldg. I / North of Bldg. J		X		X	X
B-96V	Near Southeast Corner of Building J Loading Dock		X		X	X
B-100V	South of southeastern corner of Building J		X		X	X
B-103V	South of loading dock of Building J		X		X	X
B-70V	Northeast of Building K Outside Fenceline		X		X	X
B-86V	Located South of Building C and West of Former Dry Solids Gondola Area		X		X	X
B-106V	Located South of Building C and West of Former Dry Solids Gondola Area		X		X	X
B-110	South of Building C Loading Ramp/West of B-86	X		X	X	X
B-111	South of Building C Loading Ramp/West of B-86	X		X	X	X

Notes: B-31V - Verification Soil Boring Identification
Soil Samples will be analyzed for VOCs by USEPA SW 846 Method 8260B, and collected and prepared in the laboratory using USEPA Method 5035, referred to as the *Closed System Purge and Trap and Extraction for VOCs*, June 1997.



LEGEND

- GROUNDWATER MONITORING WELL (2 INCH Ø)
- (UPRR) INDICATES A WELL ON UPRR PROPERTY
- GEOPROBE MONITORING WELL (1 INCH Ø)
- SURFACE WATER SAMPLE
- GEOPROBE SOIL BORING LOCATION (NOVEMBER 1999, PHASE I RFI)
- GEOPROBE SOIL BORING LOCATION (NOVEMBER 2001. PHASE II RFI)
- GEOPROBE SOIL BORING LOCATION (AUGUST 2002, PHASE III RFI)
- B-11* LOCATION APPROXIMATE (NO SURVEY DATA)
- RAILROAD
- FENCE
- NOT SURVEYED
- PROPERTY BOUNDARY (NOT SURVEYED)
- PROPOSED CLEAN HARBORS MONITORING WELL
- PROPOSED CLEAN HARBORS SOIL BORING LOCATION ("V" INDICATES VERIFICATION SAMPLE LOCATION)

SOURCE: CARLSON SURVEYING, APRIL 2, 2002

	BY	DATE
DRAWN	WRB	1/16/03
CHECKED		
APPROVED		
APPROVED		
APPROVED		

CAMERON-COLE

FIGURE 1

EXISTING AND PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS CLEAN HARBORS KANSAS, LLC.

SCALE: 1" = 100'

DWG. NO.: 1808-12